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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,418	03/12/2004	Yasushi Kohno	121056-0017	7131
35684	7590	09/26/2005	EXAMINER	
BUTZEL LONG 350 SOUTH MAIN STREET SUITE 300 ANN ARBOR, MI 48104			NGUYEN, SON T	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,418

Applicant(s)

KOHNO ET AL.

Examiner

Son T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 2-6 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 4,3** are rejected under 35 U.S.C. 102(b) as being anticipated by Pogue (US 4,261,139 on form PTO-892 mailed on 5/23/01).

For claim 4, Pogue discloses a process for collecting seeds from a lump consisting of a plurality of seeds having fluffy fibers (Pogue refers the fluffy fibers as “awn” or “beard”), comprising the steps of collecting the lump from a natural environment (col. 3, line 30 where Pogue discusses seed clusters); disentangling the lump after collecting the lump (col. 3, lines 29-30, where Pogue uses an elevator system to break apart the seed clusters); and burning the fluffy fibers in a single burning step (col. 6, lines 5-7) after the disentanglement of the lump (col. 3, lines 36-68, Pogue discusses using a burner assembly to burn the awn or beard of the seed).

For claim 3, Pogue further discloses that the disentanglement of the lump is carried out to such an extent that the step of burning the fibers is finished in a short period of time (col. 3, lines 29-68, the elevator system break apart the seeds clusters into individual seed to an extent that each seed is to receive full effect of the flame treatment by the burner).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 2** is ejected under 35 U.S.C. 103(a) as being unpatentable over Pogue (as above).

Pogue discloses awn or beard seeds but he does not specifically state that these seeds are from plants such as cattail, cogon, redtop, and reed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the method of collecting seeds as taught by Pogue with the seeds from the above plants depending on the user's preference as long as the seeds have awn, beard or fluffy fibers to be burned or flamed as taught by Pogue.

5. **Claims 4 & 5** are ejected under 35 U.S.C. 103(a) as being unpatentable over Kouno (4808430) in view of Pogue (as above).

Kouno teaches applying a gel coating to the seeds but not how the seeds are being prepared initially before applying the coating. As mentioned above, Pogue teaches a process for collecting seeds and preparing the seeds comprising the steps of collecting the lump from a natural environment (col. 3, line 30 where Pogue discusses seed clusters); disentangling the lump after collecting the lump (col. 3, lines 29-30, where Pogue uses an elevator system to break apart the seed clusters); and burning the fluffy fibers in a single burning step (col. 6, lines 5-7) after the disentanglement of

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the lump (col. 3, lines 36-68, Pogue discusses using a burner assembly to burn the awn or beard of the seed). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the preparation of seeds as taught by Pogue before applying the gel coating after the burning of the awing of the seeds in the method of Kouno in order to remove the awing on the seeds so that the gel can coats the seeds better, thus, enhance the growth of the seeds.

6. **Claims 4 & 6** are ejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. (5588254) in view of Pogue (as above) and Kouno (as above).

Adachi et al. teach coating the seeds with an alginic acid-based aqueous solution (col. 3, lines 55-57). However, Adachi et al. are silent about how the seeds are being prepared initially before applying the coating and dipping the seeds in a chemical solution.

As mentioned above, Pogue teaches a process for collecting seeds and preparing the seeds comprising the steps of collecting the lump from a natural environment (col. 3, line 30 where Pogue discusses seed clusters); disentangling the lump after collecting the lump (col. 3, lines 29-30, where Pogue uses an elevator system to break apart the seed clusters); and burning the fluffy fibers in a single burning step (col. 6, lines 5-7) after the disentanglement of the lump (col. 3, lines 36-68, Pogue discusses using a burner assembly to burn the awn or beard of the seed). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the preparation of seeds as taught by Pogue before coating the seeds with an alginic acid-based aqueous solution after the burning of the awing of the

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seeds in the method of Adachi et al. in order to remove the awing on the seeds so that the alginic acid-based can coats the seeds better, thus, enhance the growth of the seeds.

In addition to the above, Kouno teaches dipping the seeds into a chemical solution to enhance germination of the seeds (col. 5, lines 32-51). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate dipping the seeds into a chemical solution as taught by Kouno in the method of Adachi et al. in order to enhance germination of the seeds.

### ***Response to Arguments***

7. Applicants' arguments filed 7/14/05 have been fully considered but they are not persuasive.

**Applicant argued that Pogue does not teach a single burning step.**

Clearly in col. 6, lines 5-7, of Pogue teaches a single burning step. Applicant's claimed language merely states a single burning step without any working examples of such, thus, it is not understood why Applicant argued that Pogue does not provide any working examples of a single burning step. In addition, a single burning step is self explanatory that there is only one burning, thus, clearly from col. 6, lines 5-7 of Pogue, Pogue states that the flame treatment can be single step.

**Applicant argued that Pogue's process is not suitable for seeds that have fluffy fibers.**

Again, clearly from col. 1, lines 1-42 of Pogue, Pogue teaches fluffy fibers. Pogue is only silent about listing the type of seeds with fluffy fibers. It would have been obvious

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to one having ordinary skill in the art at the time the invention was made to perform the method of collecting seeds as taught by Pogue with the seeds from the above plants depending on the user's preference as long as the seeds have awn, beard or fluffy fibers to be burned or flamed as taught by Pogue.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

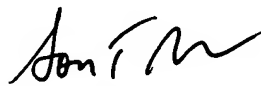
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is 571-272-6889. The examiner can normally be reached on Mon-Thu from 10:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Son T. Nguyen  
Primary Examiner  
Art Unit 3643

stn